AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. – 4.   (Canceled)

5.   (Currently Amended) A method of detecting user activity of a computer, the method comprising:

~~taking a temperature reading in connection with the computer;~~

~~determining a desired operating temperature for the computer;~~

comparing a ~~the~~ temperature reading <u>of the computer</u> and a ~~the~~ desired operating temperature <u>for the computer</u> to determine a temperature difference ~~of the temperature reading from the desired operating temperature~~;

determining a user activity indication based on the temperature difference; and

~~adjusting~~ <u>increasing</u> a clock signal frequency <u>utilized by</u> ~~applied to~~ a processor within the computer as a function of the temperature difference ~~of the temperature reading from the desired operating temperature~~ <u>if the determined user activity indication indicates that user activity has increased</u>[[,]]

~~wherein the clock signal frequency is increased when the temperature difference is positive~~.

6. – 14.   (Canceled)

15.   (Currently Amended) A system comprising:

~~a processor device having a clock input to receive a clock signal;~~

~~a temperature measurement device responsive to the processor device, the~~ <u>a</u> temperature measurement device configured to take a temperature measurement <u>of a</u> ~~for the~~ processor; and

control logic responsive to the temperature measurement device, the control logic to compare the temperature measurement to a desired operating temperature to determine a temperature difference of the temperature reading from the desired operating temperature<u>,</u> ~~; and~~

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wherein the clock signal <u>utilized by the processor device</u> ~~applied to the clock input~~ has a frequency that is increased when the <u>temperature reading is greater than the desired operating</u> temperature ~~difference is positive~~.

16.   (Currently Amended) The system of claim 15, wherein the processor device further comprises a voltage input and wherein the voltage applied to the voltage input is increased when the temperature <u>measurement is greater than the desired operating temperature</u> ~~difference is positive~~.

17.   (Currently Amended) The system of claim 15, wherein the frequency of the clock signal is decreased when the temperature <u>measurement is less than the desired operating temperature</u> ~~difference is negative~~.

18.   (Currently Amended) The system of claim 16, wherein the voltage applied to the voltage input is decreased when the temperature <u>measurement is less than the desired operating temperature</u> ~~difference is negative~~.

19.   (Original) The system of claim 16, further comprising a lookup table containing a plurality of desired operating temperatures for the processor, each of the desired operating temperatures based on different operating characteristics associated with the processor.

20.   (Original) The system of claim 19, wherein the operating characteristics include clock frequency and voltage applied to the processor.

21.   (Currently Amended) A computing system comprising:
a processor device having a clock input to receive a clock signal;
an operating system that allows a user to select between a manual clock speed mode of operation and an automatic temperature-based mode of operation;
a temperature measurement device responsive to the processor device, the temperature measurement device configured to take a temperature measurement for the processor device;

control logic responsive to the temperature measurement device, the control logic to

compare the temperature measurement with a desired operating temperature to

determine a temperature difference; and

wherein when the computing system is in the manual clock speed mode of operation, the

clock signal applied to the clock input has a substantially constant frequency and

when the computing system is in the automatic temperature-based mode of

operation, the clock signal applied to the clock input has a frequency that is

~~adjusted~~ increased based on the temperature difference of the temperature reading

from the desired operating temperature if the temperature reading is greater than

the desired operating temperature.

22.   (Original) The computer system of claim 21, wherein the temperature
measurement device takes a plurality of temperature measures and the temperature measurement
is determined by taking an average of the plurality of temperature measurements.

23.   (Original) The computer system of claim 21, wherein the predetermined desired
operating temperature is read from a look-up table.

24.   (Original) The computer system of claim 21, wherein the desired operating
temperature is computed based on a plurality of factors, the plurality of factors including the
current frequency, voltage, and temperature of the processor device.

25.   (Previously Presented) The computer system of claim 24, wherein the desired
operating temperature is modified based on environmental variations affecting the processor
device.

26. – 30. (Canceled)

31.   (Currently Amended) A method comprising:
determining user activity for one or more processors, wherein the determining is based, at

least in part, on a measured temperature that corresponds to the one or more

processors; and

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adjusting performance of the one or more processors in accordance with the determined user activity,

wherein the adjusting performance comprises increasing performance of the at least one of the processors if the determined user activity increases or is high.

32. – 35. (Canceled)

36. (New) An apparatus comprising:

a set of one or more processors;

a temperature sensor operable to measure temperature corresponding to the set of processors;

a store unit operable to store desired operating temperatures; and

means for increasing performance of the set of processors if a temperature measured by the temperature sensor exceeds a desired operating temperature stored in the store unit.

37. (New) The apparatus of claim 33 further comprising means for periodically activating the temperature sensor to measure temperature.

38. (New) A method of adjusting performance of a computer to satisfy user activity as represented by temperature, the method comprising:

measuring a temperature of the computer;

computing a difference between the measured temperature of the computer and a desired operating temperature for the computer; and

increasing performance of the computer in accordance with the computed difference if the measured temperature is greater than the desired operating temperature.

39. (New) The method of claim 38 further comprising decreasing performance of the computer in accordance with the computed difference if the measured temperature is less than the desired operating temperature.

40.   (New) The method of claim 5 further comprising increasing the clock signal frequency utilized by a processor within the computer as a function of the temperature difference if the determined user activity indication indicates that user activity is high.